

# Pharmacy Cost Parameters: Dispensing and Drug Acquisition Costs

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## Goals:

1. Highlight DHFS 2002 study findings
2. Update cost estimates
3. Provide other marketplace parameters and insights

# 1. DHFS Study Topic & Goals

Cost of dispensing - what is the average cost of dispensing a prescription among pharmacies in Wisconsin?

Acquisition cost - how do purchase costs of pharmaceuticals relate to reference prices (i.e., actual acquisition cost (AAC) vs. average wholesale price (AWP) - percent “discount”

Results intended to inform rate setting for pharmacy payment/reimbursement in Medicaid program.

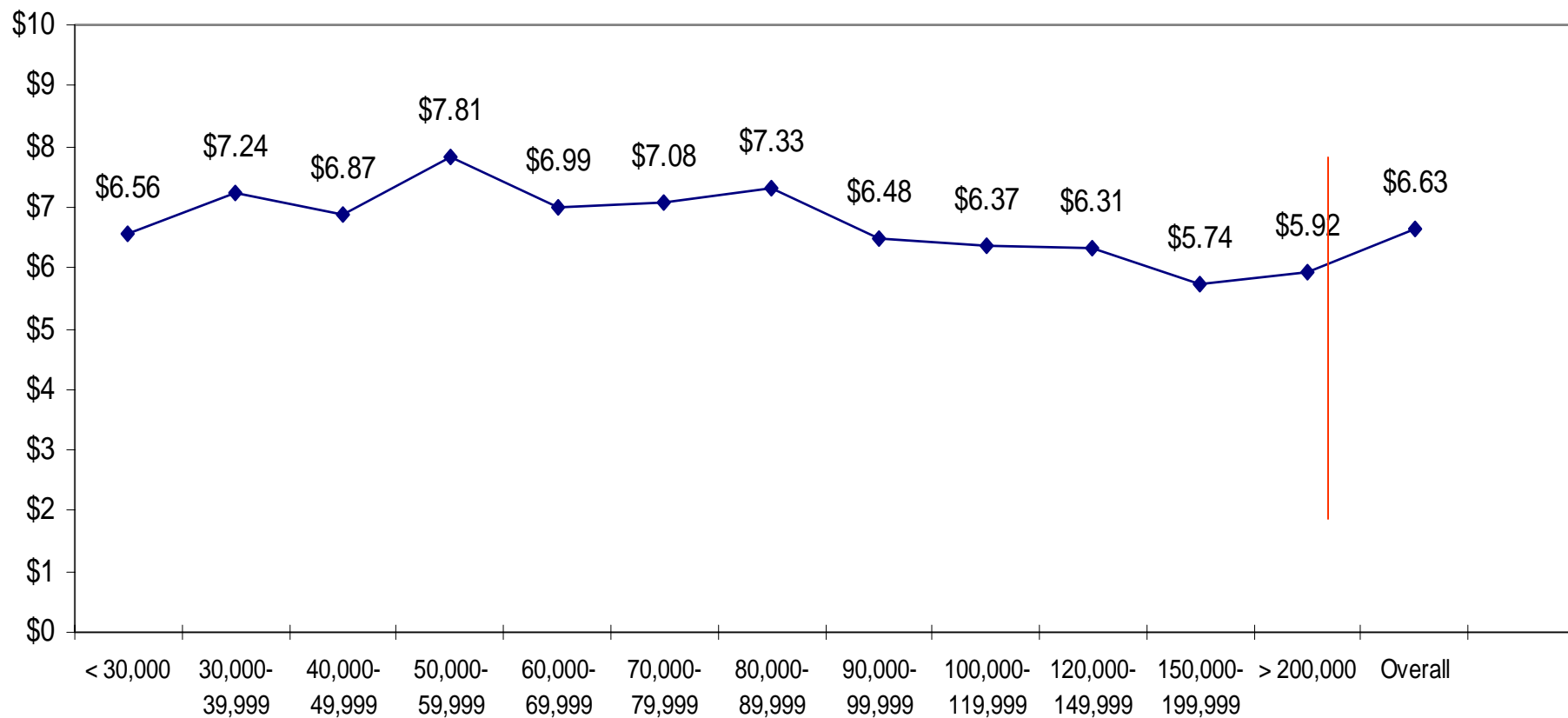
# DHFS Cost of Dispensing Study Findings

Overall (N=185)	\$6.972
<5,>10 excluded (N=167)	\$6.846
<4.5,>10 excl (N=149)	<b>\$6.627</b>
Overall range = \$3.96 to \$17.49; std. dev.= \$2.07	

Calculations based on data from FY ending in 2000.

Results include independent, chain, and mass merchandiser pharmacies.

# Cost of Dispensing by Prescription Volume



Excludes extreme values < \$4.50 and > \$10.00

# Updating DHFS Study Results

	<u>2000 Actual*</u>			<u>2005 Estimated</u>		
	Sal/RX	Oth/RX	Total	Sal/RX	Oth/RX	Total
All	3.983	3.025	7.008	5.587	3.389	8.976
Outliers1	3.780	2.859	6.638	5.301	3.203	8.504
Outliers2	3.859	3.004	6.863	5.413	3.365	8.778

Outliers 1 = <4.5,>10 excl.; Outliers2 = <5,>10 excl.

\* Data points w/o salary detail excluded; N=6 excluded

Estimated using 7.0% per annum growth rate for salaries, 2.3% per annum for other expenses.  
7.0% per annum growth rate from 1999 - 2003 WI RPh Compensation Surveys;  
2.3% per annum growth rate is average annual growth in the CPI, all items, from the BLS

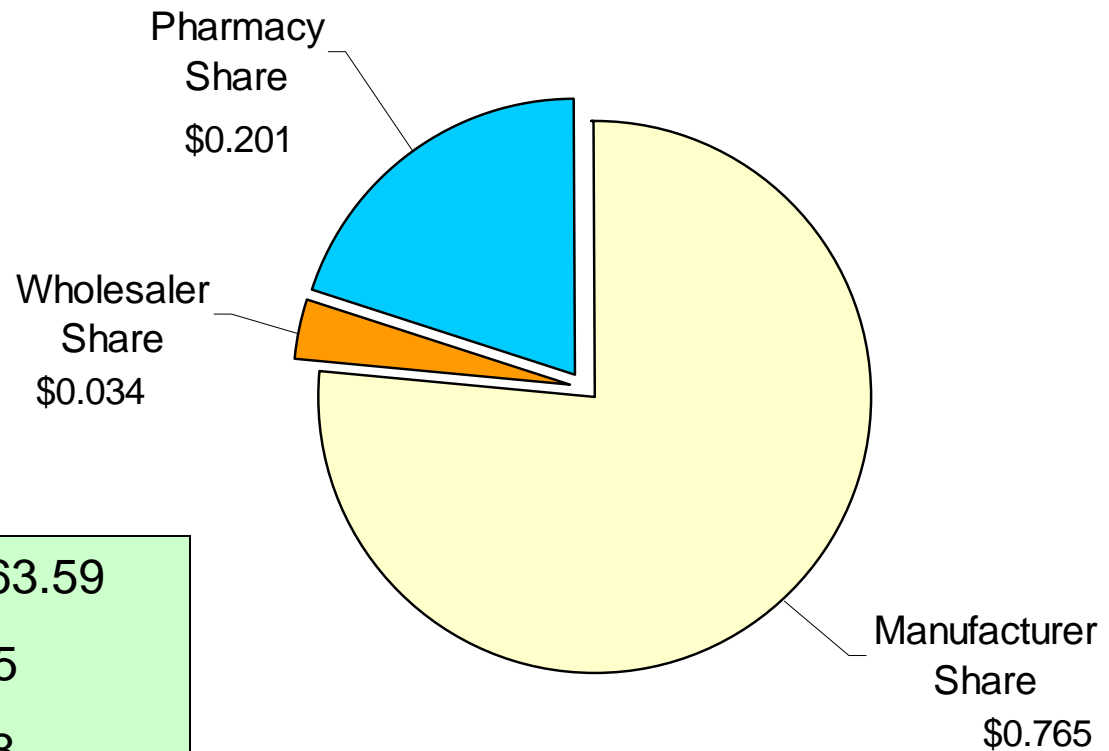
# Updating DHFS Study Results

2005 Estimated				2006 Estimated				2007 Estimated		
Salry	Other	COD		Salry	Other	COD		Salry	Other	COD
\$5.59	\$3.39	\$8.98		\$5.98	\$3.47	\$9.45		\$6.40	\$3.55	\$9.94
\$5.41	\$3.37	\$8.78		\$5.79	\$3.44	\$9.23		\$6.20	\$3.52	\$9.72
\$5.30	\$3.20	<b>\$8.50</b>		\$5.67	\$3.28	<b>\$8.95</b>		\$6.07	\$3.35	<b>\$9.42</b>

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# Other Marketplace Parameters

## Distribution of a Dollar of Revenue from a Retail Prescription, 2004



Average RX Price = \$63.59

Manufacturer: \$48.65

Wholesaler: \$2.18

Pharmacy: \$12.77

Source: National Association of Chain Drug Stores, [nacds.org](http://nacds.org), data for 2004



## Extrapolating a Cost Estimate - National Marketplace Parameters

Average RX Price = \$63.59

Manufacturer: \$48.65

Wholesaler: \$2.18

Pharmacy: \$12.77

Gross Margin (\$12.77 = cost of dispensing + profit)

"Reasonable" profit (?) = 5%, then,

$\$63.59 * 0.05 = \$3.18$  (profit);

$\text{COD} = \text{GM less profit} = \$12.77 - \$3.18 = \$9.59$

# DHFS Study Results: Drug Acquisition Costs

<b>Type of Drug</b>	<b>Wholesaler 1</b> Avg. % Discount (Range)	<b>Wholesaler 2</b> Avg. % Discount (Range)	<b>Wholesaler 3</b> Avg. % Discount (Range)
<b>Single-Source (Brand Name)</b>	17.46% (14.57 - 26.18) N=199	17.54% (14.15 - 24.10) N=145	17.23% (12.50 - 23.67) N=169
<b>Multiple-Source Innovator (Brand Name)</b>	17.64% (14.99 - 26.07) N=94	17.71% (14.16 - 26.24) N=39	18.13% (12.48 - 32.41) N=82
<b>Brand Name (SS &amp; MSI Combined)</b>	17.52% (14.57 - 26.18) N=293	17.58% (14.15 - 26.24) N=184	17.52% (12.48 - 32.41) N=251
<b>Multiple-Source Generic</b>	76.16% (22.60 - 98.79) N=192	75.34% (14.29 - 98.40) N=91	74.44% (10.97 - 98.21) N=154

Data for January 2001

Modal values: Brand name @ 15-17%, and 19-20%; Multiple-source generics @ 70+%

# Acquisition Cost Study Updates/Marketplace Parameters

AWP vs. AAC: Percent off AWP = AAC

Brand Name (N=453): 21.31%

Range: 17.03 - 40.79

Std Dev.: 1.44%

Modal: 21.2 (11 < 21.1%; 6 > 22.5%)

Generic Name (N= 339): 77.24%

Range: 31.95 - 98.66

Std Dev.: 16.34%

Modal: ??

Calculations based on data accessed November 2005, from buying group web site.

# Estimating Proposed Changes - Impact

Formula changes from AWP less 13% to AWP less 16%.

Average Brand RX price = \$96.01

Less average margin (\$12.77)

Cost of drug dispensed = \$83.24

If AAC = AWP less 21%, then AWP = \$105.36

3% of AWP at \$105.36 AWP = \$3.16

= average amount of ingredient payment cost reduction

(Plus, \$1.00 for each dispensed prescription from dispensing fee reduction)

## RELEVANT QUESTIONS

What are Medicaid prescription payment goals?

What is the role of accurate cost information?

How can the State ensure they are a prudent purchaser?

## IDEAS

Establish accurate drug acquisition cost payment mechanism. Electronic funds transfer technology?

Establish accurate, cost-based dispensing fee.  
Market based/ linked to market parameters?

Continue efforts for "big ticket" item savings opportunities.



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